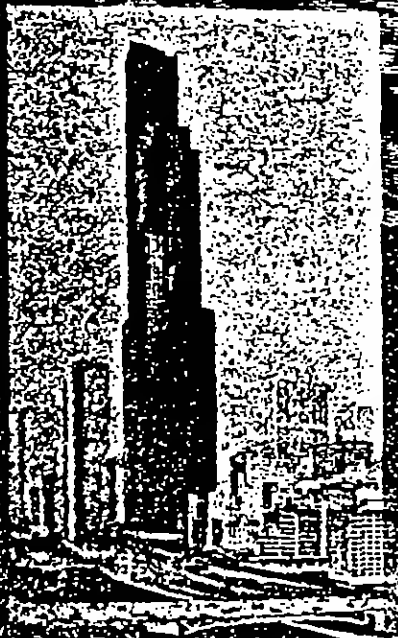
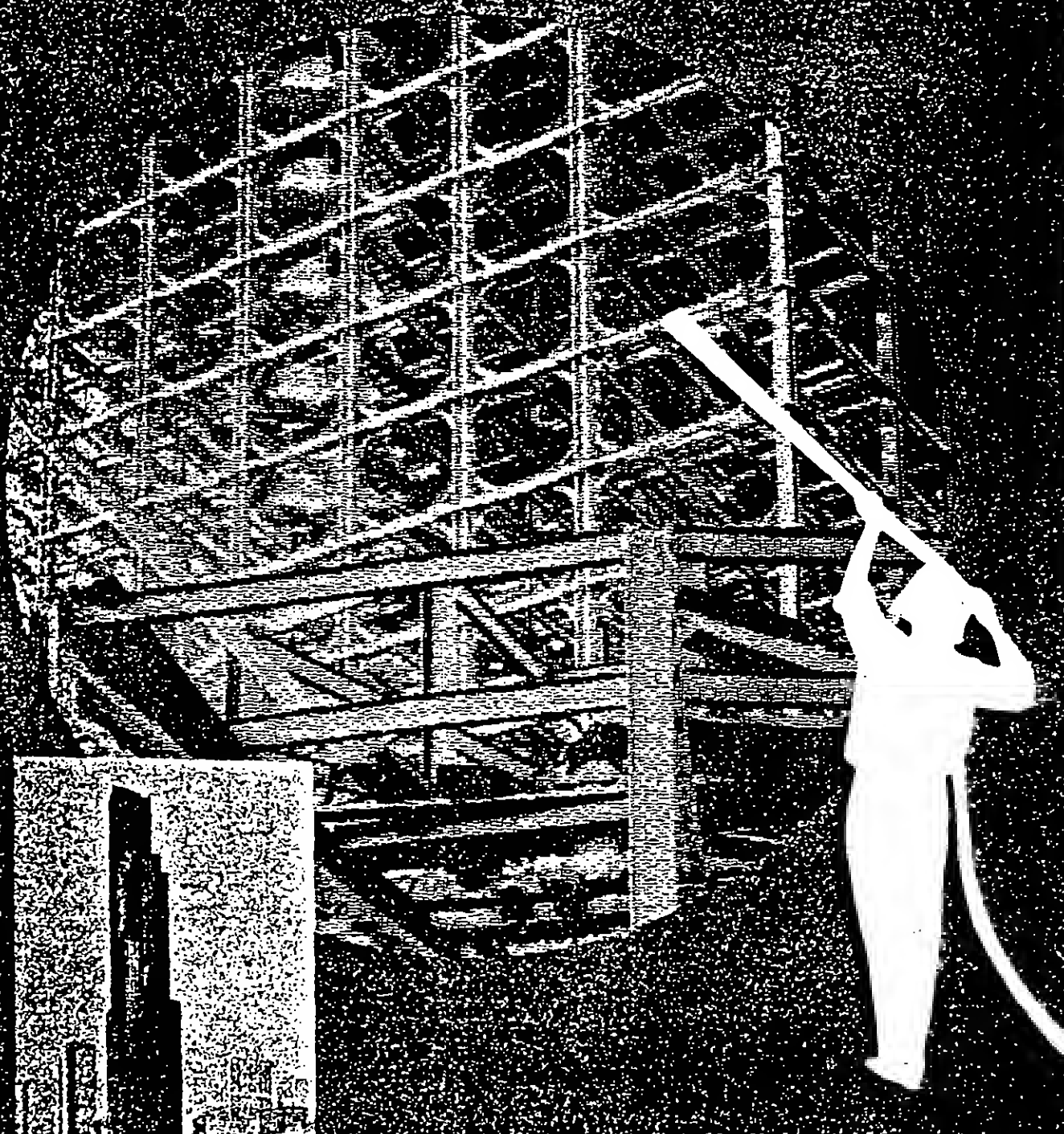




# BLAZE-SHIELD



UNITED STATES MINERAL  
**U** **M**  
PRODUCTS COMPANY



# BLAZE-SHIELD

## TYPE D C/F

CAFCO BLAZE-SHIELD Type D C/F is a factory formulated blend of manufactured virgin mineral fibers and proprietary binders designed specifically for direct-to-steel fireproofing. It also has excellent thermal insulation and acoustical absorption properties—often eliminating the need for supplemental insulation or acoustical materials. Particularly suitable for large, long-span structures, one coat can be built up to any U.L. required thickness.

Type D C/F exceeds U.S. Government requirements for use in air handling plenum chambers. It maintains high bond strength under normal structural movement, and will not crack or spall, dust or flake. It provides deflection and bond-impact characteristics for building occupancy.

It is economical to apply and normally does not require a primary adhesive, tamping or a sealer coat, and can usually be applied from floor level, without scaffolding.

### CHARACTERISTICS

**Environmental safety**—Studies conducted by expert medical authorities, have shown that there is no hazard to the health of workers or the public in typical applications.

**Fire rating by U.L.**—Type D C/F is listed by U.L. for virtually any combination of column, beam or floor assemblies.

**Fire hazard:** Tested and reported in accordance with ASTM E-84 by Underwriters' Laboratories, Inc.

**Resistance to air erosion**—Resists erosion, dusting or flaking due to high velocity air movement. It exceeds GSA requirements.

**Dry density**—Average 15 p.c.f. U.L., Inc. lists 13 p.c.f. minimum average density.

**One coat application**—Proper U.L. required thicknesses typically can be applied in one pass.

**Thermal properties**—Type D C/F has a factor of 0.29 at 75°F. Independent laboratory tests available.

**Acoustical absorption**—The problem of sound transmission through the plenum space is markedly reduced. The conventional D C/F job affords an NRC rating of 0.85.

**Protection against corrosion**—Independent laboratory tests confirm that GSA requirements are met or exceeded.

### GUIDE SPECIFICATIONS

#### 1. Scope

##### 1.2 Work Included

Provide all labor, materials and equipment required for complete installation of all sprayed fireproofing and related work as shown on the drawings or specified herein, and in accordance with all applicable requirements of the Contract Documents.

##### 1.2 Work Not Included

- If cleaning required.
- Healing for cold weather applications.
- Utilities.

1.3 The material and installation shall conform to the building code requirements and authorities having jurisdiction.

#### 2. Materials

2.1 The sprayed fireproofing material shall be CAFCO BLAZE-SHIELD Type D C/F as manufactured by United States Mineral Products Company (in Canada—Columbia Acoustics & Fireproofing Co., Ltd.)

2.2 The material shall be delivered to the job and in sealed bags, labelled as to application and manufacturer. Materials shall be stored in a dry place.

2.3 Water shall be clean, fresh and free from organic and mineral impurities which would be harmful to the sprayed fireproofing material.

### TABLE OF FIRE RESISTANCE RATINGS

Type of Assembly	Fire Resistance Rating (Hours)			
	1	2	3	4
Column				
Beam				
Floor				
Roof				
Wall				
Door				
Window				
Staircase				
Elevator				
Shaft				
Other				



# OTHER CAFCO PRODUCTS CONTAINING NO ASBESTOS- NO FREE CRYSTALLINE SILICA for fireproofing, sound absorption and thermal insulation

## DECK-SHIELD C/F Spray fireproofing for large surface areas

DECK-SHIELD is specifically formulated for spray application use on metal building walls, roof deck and ceiling design without concrete toppings, and ship bulkheads.

### FEATURES

**Metal Walls Listing:** UL Design Nos. U801 & U803.

**Roof Deck Listing:** UL Design No. P801.

**Other Designs:** D831; D832; D833; D840; N803; N805; X818.

**Quick Hardening:** DECK-SHIELD C/F sets up hard in approximately ONE hour, eliminating delays so that other work may proceed immediately.

## POWER-SHIELD C/F Thermal insulation for ambient to 1400°F

Spray POWER-SHIELD C/F thermal insulation on power-generating or process equipment such as boilers, turbines, tanks, ovens, dryers . . . even chimneys. It can be applied in any thickness to virtually any shape or contour.

### FEATURES

**Efficient thermal insulation.** Provides "k" factors of 0.26 and 0.53 at 75° and 500°F. mean test temperatures, respectively. Can be applied to equipment already in operation at temperatures to 600°F. Service temperature range is ambient to 1400°F.

**Economical installation.** Spray application appreciably reduces installation costs. Eliminates cutting, fitting, laminating, staggering and securing separate slabs and pieces of insulating material.

**Joint-free coating.** Monolithic coating has no seams at which heat losses can occur. There are no voids or crevices in which corrosive condensation can form.

**Permanence.** POWER-SHIELD C/F is inorganic, chemically stable and flexible enough to expand and contract with the equipment it covers without cracking or spalling.

### CAFCO FIELD ASSISTANCE SERVICE

Users and specifiers of CAFCO products can count on assistance from one of the largest contractor and service organizations in the world. Experienced, licensed CAFCO contractors and representatives are available to serve you throughout the United States and Canada, and in 38 foreign countries. CAFCO service personnel will answer your questions concerning estimates, specifications and code approvals. A job-inspection service is available to architects, general contractors and owners. Look to the CAFCO field service program for prompt, knowledgeable assistance designed to help you keep planning and construction schedules on target.

## SOUND-SHIELD "85" Sprayed acoustical ceilings

Use SOUND-SHIELD "85" for acoustical treatment of ceilings and walls of virtually any contour. It has a hard white attractive finish, is U.L. fireproof, tested and listed and provides thermal insulation as an extra bonus. (k) factor at 75 F. is 0.34. See catalog in Sweet's Architectural File Unit.

### FEATURES

Can be applied to concrete, plaster and, plaster metal lath.

Provides NRC ratings as high as 0.85 for 1 1/2 inch thick. Surface hardness equivalent to plaster.

Natural light reflectance rating is 76 percent.

Fibrous lime base composition prevents rust bleeding through.



CAFCO SOUND-SHIELD "85" installations include the University of Notre Dame Athletic and Convocation Center.

TABLE OF SOUND ABSORPTION

Thick- ness	Frequency (Hz)						4000 Hz
	125	250	500	1000	2000	4000	
	Coefficient Ratio						
1/2" Metal Lath	.26	.51	.98	.99	.99	.99	.99
1/2" M/L and Plaster*	.39	.61	.61	.78	.91	.91	.91
1/2" Solid	.03	.17	.50	.79	.84	.78	.68
3/4" Solid	.02	.08	.26	.60	.84	.89	.89
1" Solid	.04	.04	.20	.39	.60	.81	.80

Tests conducted in accordance with ASTM C-423-67 at Riverbank Acoustical Laboratories, Geneva, Illinois and Knolls Acoustical Laboratories, Cedar Knolls, New York.  
\*A stiffening plaster basecoat of minimum practical thickness.

